Office of Electricity Delivery and Energy Reliability

Infrastructure Security and Energy Restoration

ENERGY ASSURANCE DAILY

Wednesday Evening, November 30, 2016

Electricity

Power Restoration Underway in Eastern Canada after Snowstorm Hits November 29-30

A winter storm producing a mix of snow and rain knocked out power to at least 71,000 customers in New Brunswick, Nova Scotia, and Prince Edward Island on Tuesday night with impacts lasting into Wednesday. Heavy, wet snow weighing down power lines caused the majority of the power outage, according to utilities. As of 3:30 p.m. EST Wednesday, 31,403 customers remained without power. The table below shows affected customers and the latest reported outages by utility. The "Affected" column shows the total count of customers that lost power at one point or another over the course of the storm for each utility. These outages may not have occurred concurrently and are not the same as peak outages.

Eastern Canada Customer Power Outages November 29 – 30, 2016				
Electric Utility	State	Affected	Latest Reported	
NB Power	New Brunswick	43,000	20,746	
Nova Scotia Power	Nova Scotia	19,000	8,957	
Maritime Electric	Prince Edward Island	11,000	1,700	

Sources:

http://www.nbpower.com/Open/Outages.aspx

https://twitter.com/nb power

http://outagemap.nspower.ca/external/default.html

http://www.maritimeelectric.com/power_outages/current_poweroutages.aspx

http://www.cbc.ca/news/canada/nova-scotia/nova-scotia-storm-1.3873985

 $\underline{http://www.theguardian.pe.ca/news/local/2016/11/30/wait--storms-back-on-today--tomorrow-for-p-e-i---maybe.html}$

Update: Southern's 830 MW Farley Nuclear Unit 1 in Alabama Ramps Up to 78 Percent by November 30

On the morning of November 29 the unit restarted and ramped up to 13 percent. The unit was shut from full power on November 27 due to voltage oscillations.

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/

http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2016/20161128en.html

TVA's 1,150 MW Watts Bar Nuclear Unit 2 in Tennessee Ramps Up to Full Power by November 30

On the morning of November 29 the unit was operating at 75 percent, reduced from full power on November 28. http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/

SCE's 820 MW Big Creek Hydro Unit in California Reduced by November 29

The unit entered an unplanned curtailment of 477 MW.

http://content.caiso.com/unitstatus/data/unitstatus201611291515.html

San Diego Gas & Electric's 575 MW Palomar Gas-fired Unit in California Reduced by November 29

The unit entered an unplanned curtailment of 374 MW.

http://content.caiso.com/unitstatus/data/unitstatus201611291515.html

Update: Canadian Prime Minister Approves Kinder Morgan's Trans Mountain Pipeline Expansion, Enbridge's Line 3 Replacement Projects; Rejects Enbridge's Northern Gateway Project November 29

Canadian Prime Minister Justin Trudeau on Tuesday evening revealed final decisions on three pipeline projects proposed by Kinder Morgan and Enbridge. Kinder Morgan's Trans Mountain pipeline expansion project and Enbridge's Line 3 replacement project were both approved, while Enbridge's Northern Gateway proposal was rejected. Kinder Morgan's Trans Mountain expansion will increase the capacity of the existing pipeline from 300,000 b/d to 890,000 b/d. The highly-utilized existing pipeline primarily transports crude oil from the Alberta oil sands region to destinations in British Columbia and the U.S. Pacific Northwest. The company said its next steps include reviewing the project's final cost estimate with shippers, and reviewing its final investment decision with the company's board of investors. Construction of the expansion project is scheduled to begin in September 2017, with the expanded capacity placed in service during the second half of 2019. Meanwhile, Enbridge said it was pleased with the approval of the Line 3 replacement project, but disappointed by the government's decision to reject its Northern Gateway project, a twin pipeline system with the capacity to ship 525,000 b/d of crude oil from the Alberta oil sands region to a new marine terminal on the British Columbia Coast for export, and the capacity to transport 193,000 b/d of imported condensates from the new marine terminal to Alberta. Trudeau indicated the project was rejected due to the increased number of oil tankers that would be moving through British Columbia's sensitive coastal ecosystem. The company said its Line 3 replacement project is the biggest project in Enbridge's history, which involves replacing approximately 1,031 miles of pipeline along the line's route from Alberta to Superior, Wisconsin, as well as the construction of new pipeline facilities in several locations. The project is intended to maintain system integrity, and to restore operating capacity to 760,000 b/d. Enbridge expects the project to be completed in 2019.

 $\frac{http://ir.kindermorgan.com/press-release/kindermorgan/trans-mountain-receives-final-federal-approval-expansion}{http://www.enbridge.com/projects-and-infrastructure/projects/line-3-replacement-program-us}$

Reuters, 18:17 November 29, 2016 Reuters, 17:38 November 29, 2016

PBF Reports Emissions at Its 182,200 b/d Delaware City, Delaware Refinery November 30

PBF Energy reported excess carbon monoxide emissions from its Delaware City, Delaware refinery on Wednesday, according to a filing with the state pollution regulator.

Reuters, 14:43 November 30, 2016

Valero Attempts Hydrocracker Restart at Its 125,000 b/d Meraux, Louisiana Refinery November 29 – Sources

Valero Energy Corp on Tuesday night was attempting to restart the hydrocracker at its Meraux, Louisiana, refinery, according to sources familiar with plant operations. The 55,000 b/d hydrocracker was shut on Tuesday when a compressor failed on the unit, the sources said.

Reuters, 21:59 November 29, 2016

U.S. Commercial Crude Inventories Fall 884,000 Barrels – EIA

U.S. commercial crude inventories fell by 884,000 barrels to about 488.1 million during the week ending November 25, data from the Energy Information Administration (EIA) showed on Wednesday. Crude stocks at the Cushing, Oklahoma delivery hub rose by 2.4 million barrels to about 61.5 million barrels. Reuters, 10:33 November 30, 2016

Sempra Files FERC Application to Construct NGL Facility in Texas November 29

Sempra Energy on Tuesday announced its liquefied natural gas (LNG) subsidiaries filed applications with the Federal Energy Regulatory Commission (FERC) seeking authorization to site, construct, and operate the proposed Port Arthur LNG natural gas liquefaction facility along the Sabine-Neches Waterway in Southeast Texas. The FERC application for the proposed project includes two natural gas liquefaction trains capable of producing approximately 698 billion cubic feet of natural gas per year, three LNG storage tanks, natural gas liquids and refrigerant storage, feed gas pre-treatment facilities, and two berths with associated marine and loading facilities. A separate application was filed with FERC seeking authorization to construct natural gas pipelines to deliver natural gas to the project. http://sempra.mediaroom.com/index.php?s=19080&item=137221

Other News

Enterprise Shuts East Red Line Segment of Its Mid-America NGLs Pipeline after Fire in Missouri November 29

Enterprise Products Partners' reported a segment of its Mid-America pipeline system caught fire on Tuesday afternoon about six miles from the Kansas City, Missouri airport. The affected segment, the pipeline system's East Red line, was shipping a mixture of ethane/propane to the Midwest when the fire occurred. An Enterprise spokesman said late Tuesday that the segment had been isolated and the fire was diminishing as product was burning off. The East Red Line transports natural gas liquids (NGLs) from the large NGL storage hub in Conway, Kansas, to Iowa City, Iowa and Morris, Illinois, where LyondellBasell operates a petrochemical plant. The system ships several grades of NGLs, including ethane/propane mix, which can be used by petrochemical operators in the production of ethylene.

Reuters, 22:24 November 29, 2016

International News

OPEC Agrees to First Oil Output Cut since 2008 – Source

The Organization of the Petroleum Exporting Countries (OPEC) on Wednesday agreed to its first limit on oil output since 2008 after Saudi Arabia said it was prepared to accept "a big hit" on production, an OPEC source told Reuters. The source said OPEC had agreed to a deal that was in line with an accord the 14-country group made in Algiers in September to cap output to prop up oil prices, which have halved since mid-2014. OPEC member Algeria was proposing to set a new production ceiling at 32.5 million b/d, down from current levels of 33.6 million b/d. The source gave no further details as two other OPEC sources said debates were continuing on the size of each member country's cut. Before the meeting, Saudi Arabia's Energy Minister said OPEC was focusing on reducing output to a ceiling of 32.5 million b/d and hoped Russia and other non-OPEC producers would contribute a cut of another 0.6 million b/d. OPEC said it would exempt Iran, Libya and Nigeria from cuts as their output has been crimped by unrest and sanctions.

Reuters, 9:07 November 30, 2016

Energy Prices

U.S. Oil and Gas Prices November 30, 2016				
	Today	Week Ago	Year Ago	
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	49.36	46.62	40.38	
NATURAL GAS Henry Hub \$/Million Btu	3.04	2.74	2.06	

Source: Reuters

Links

This Week in Petroleum from the U.S. Energy Information Administration (EIA)

http://www.eia.gov/oog/info/twip/twip.asp

Updated every Wednesday.

Weekly Petroleum Status Report from EIA

http://www.eia.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html Updated after 10:30 AM & 1:00 PM ET every Wednesday.

Natural Gas Weekly Update from EIA

http://www.eia.gov/oog/info/ngw/ngupdate.asp

Updated after 2:00 PM ET every Thursday.

ENERGY ASSURANCE DAILY

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